HARPSTER COMMUNITY SYSTEM (PWS 2250026)
SOURCE WATER ASSESSMENT FINAL REPORT

April 7, 2003

State of Idaho
Department of Environmental Quality

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Executive Summary

Under the Safe Drinking Water Act Amendments of 1996, all states are required by the U.S. Environmental Protection Agency (EPA) to assess every source of public drinking water for its relative sensitivity to contaminants regulated by the Act. This assessment is based on a land use inventory of the designated source water assessment area and sensitivity factors associated with the spring and aquifer characteristics.

This report, *Source Water Assessment for Harpster Community System, Harpster, Idaho*, describes the public drinking water system (PWS), the boundaries of the zones of water contribution, and the associated potential contaminant sources located within these boundaries. This assessment should be used as a planning tool, taken into account with local knowledge and concerns, to develop and implement appropriate protection measures for this source. **The results should <u>not be</u> used as an absolute measure of risk and they should <u>not be</u> used to undermine public confidence in the water system.**

The Harpster Community System drinking water system consists of one spring. The spring is located northeast of the City of Harpster approximately ½ mile from the South Fork Clearwater River and Highway 13. The water from the spring is stored in a 10,000-gallon reservoir and disinfected using a hypochlorinator. The system currently serves 30 people through 18 connections.

Final spring susceptibility scores are derived from heavily weighting potential contaminant inventory/land use scores and adding them with system construction scores. Therefore, a low rating in one category coupled with a higher rating in the other category results in a final rating of low, moderate, or high susceptibility. Potential contaminants are divided into four categories: inorganic chemical (IOC, e.g., nitrates, arsenic) contaminants, volatile organic chemical (VOC, e.g., petroleum products) contaminants, synthetic organic chemical (SOC, e.g., pesticides) contaminants, and microbial contaminants (e.g., bacteria). As a spring can be subject to various contamination settings, separate scores are given for each type of contaminant.

In terms of total susceptibility, the Harpster Community spring rated automatically high for all potential contaminant categories: IOCs, VOCs, SOCs, and microbial contaminants. A field inspection completed in July 1997 indicates that nearby creek flows within the 100-foot sanitary setback of the spring, resulting in automatic high susceptibility ratings. If this creek were diverted to a location greater than 100 feet from the spring collection area, the overall susceptibility of the system would be reduced.

No SOCs or VOCs have ever been detected in the spring. Trace concentrations of the IOCs chromium, fluoride, selenium, and nitrate have been detected in tested water, but at concentrations significantly below maximum contamination levels (MCLs) as set by the EPA. Alpha and beta particles (radionuclides) have also been detected in the system at levels below the MCLs. Total coliform bacteria have been detected in the system from 1995 to 2002 with confirmatory detections in the distribution system in February 1997, August 1999, November 1999, March, April, and May 2000, and August 2002. Additionally, the 1997 sanitary survey indicates that a boil notice was enforced in early 1997 due to bacterial issues. However, no detections have occurred at the spring.

This assessment should be used as a basis for determining appropriate new protection measures or re-evaluating existing protection efforts. No matter what ranking a source receives, protection is always important. Whether the source is currently located in a “pristine” area or an area with numerous industrial and/or agricultural land uses that require surveillance, the way to ensure good water quality in the future is to act now to protect valuable water supply resources. If the system should need to expand in the future, new well or spring sites should be located in areas with as few potential sources of contamination as possible, and the site should be reserved and protected for this specific use.

For the Harpster Community System, drinking water protection activities should first focus on correcting any deficiencies outlined in the sanitary survey (an inspection conducted every five years with the purpose of determining the physical condition of a water system’s components and its capacity). Actions should be taken to keep a 100-foot radius perimeter clear of all potential contaminants from around the spring. Any contaminant spills within the delineation should be carefully monitored and dealt with. The Harpster Community System may want to consider reconstructing the infiltration gallery and the spring box to further protect their drinking water source. As much of the designated protection areas are outside the direct jurisdiction of the Harpster Community drinking water system, collaboration and partnerships with state and local agencies, and industry groups should be established and are critical to the success of drinking water protection.

Due to the time involved with the movement of ground water, drinking water protection activities should be aimed at long-term management strategies even though these strategies may not yield results in the near term. A strong public education program should be a primary focus on any drinking water protection plan as the delineation may contain some urban and residential land uses. Public education topics could include proper lawn care practices, household hazardous waste disposal methods, and the importance of water conservation to name but a few. There are multiple resources available to help communities implement protection programs, including the Drinking Water Academy of the EPA.

A community must incorporate a variety of strategies in order to develop a comprehensive drinking water protection plan, be they regulatory in nature (e.g. zoning, permitting) or non-regulatory in nature (e.g. good housekeeping, public education, specific bet management practices). For assistance in developing protection strategies please contact the Lewiston Regional Office of the Idaho Department of Environmental Quality or the Idaho Rural Water Association.

SOURCE WATER ASSESSMENT FOR HARPSTER COMMUNITY SYSTEM, HARPSTER, IDAHO

Section 1. Introduction - Basis for Assessment

The following sections contain information necessary to understand how and why this assessment was conducted. **It is important to review this information to understand what the rankings of this assessment mean.** Maps showing the delineated source water assessment area and the inventory of significant potential sources of contamination identified within that area are attached. The list of significant potential contaminant source categories and their rankings used to develop the assessment is also included.

Background

Under the Safe Drinking Water Act Amendments of 1996, all states are required by the EPA to assess every source of public drinking water for its relative susceptibility to contaminants regulated by the Safe Drinking Water Act. This assessment is based on a land use inventory of the delineated assessment area and sensitivity factors associated with the spring and aquifer characteristics.

Level of Accuracy and Purpose of the Assessment

Since there are over 2,900 public water sources in Idaho, there is limited time and resources to accomplish the assessments. All assessments must be completed by May of 2003. An in-depth, site-specific investigation of each significant potential source of contamination is not possible. **Therefore, this assessment should be used as a planning tool, taken into account with local knowledge and concerns, to develop and implement appropriate protection measures for this source. The results should <u>not be</u> used as an absolute measure of risk and they should <u>not be</u> used to undermine public confidence in the water system.**

The ultimate goal of the assessment is to provide data to local communities to develop a protection strategy for their drinking water supply system. The Idaho Department of Environmental Quality (DEQ) recognizes that pollution prevention activities generally require less time and money to implement than treatment of a public water supply system once it has been contaminated. DEQ encourages communities to balance resource protection with economic growth and development. The local community, based on its own needs and limitations, should determine the decision as to the amount and types of information necessary to develop a drinking water protection program. Drinking water protection is one facet of a comprehensive growth plan, and it can complement ongoing local planning efforts.

Section 2. Conducting the Assessment

General Description of the Source Water Quality

The Harpster Community drinking water system consists of one spring. The spring is located northeast of the City of Harpster approximately ½ mile from the South Fork Clearwater River and Highway 13 (Figure 1). The water from the spring is stored in a 10,000-gallon reservoir and disinfected using a hypochlorinator. The system currently serves 30 people through 18 connections.

No SOCs or VOCs have ever been detected in the spring. Trace concentrations of the IOCs chromium, fluoride, selenium, and nitrate have been detected in tested water, but at concentrations significantly below MCLs as set by the EPA. Alpha and beta particles (radionuclides) have also been detected in the system at levels below the MCLs. Total coliform bacteria have been detected in the system from 1995 to 2002 with confirmatory detections in the distribution system in February 1997, August 1999, November 1999, March, April, and May 2000, and August 2002. Additionally, the 1997 sanitary survey indicates that a boil notice was enforced in early 1997 due to bacterial issues. However, no detections have occurred at the spring.

Defining the Zones of Contribution – Delineation

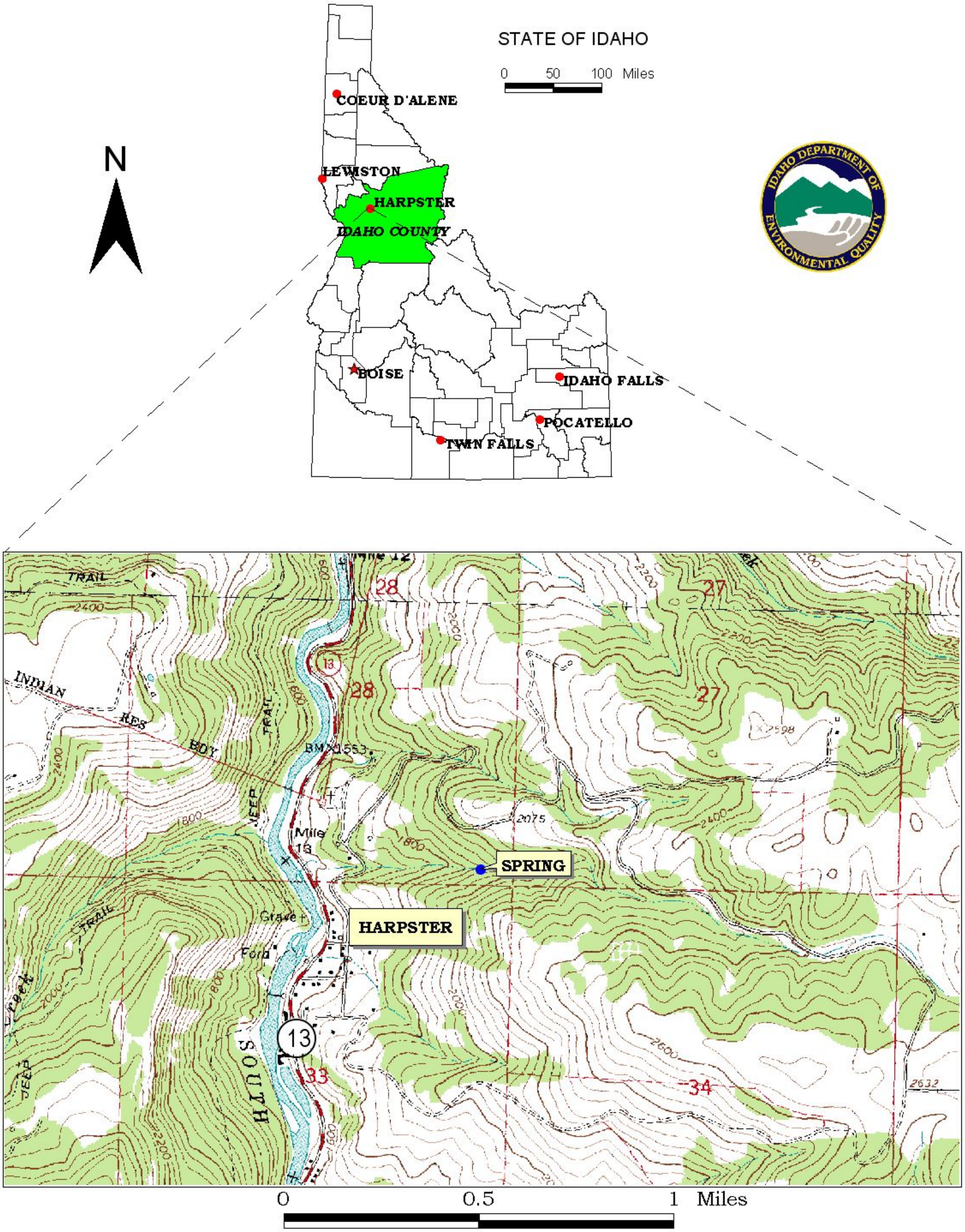
The delineation process establishes the physical area around a spring that will become the focal point of the assessment. The process includes mapping the boundaries of the zone of contribution into time-of-travel (TOT) zones (zones indicating the number of years necessary for a particle of water to reach a spring) for water in the aquifer. DEQ contracted with the University of Idaho to perform the delineations using a method of surface mapping of hydrogeologic features approved by the EPA in determining the 3-year time of travel (TOT) (Zone 1B) for water in the vicinity of the Harpster Community System spring. The model used site specific data, assimilated by the University of Idaho from a variety of sources including operator input, local area well logs, and hydrogeologic reports (detailed below).

The conceptual hydrogeologic model for the Harpster community source spring is based on interpretation of nearby available well logs and published geologic maps. The spring derives water from the Grande Ronde basalt of the Columbia River Basalt Group. Bedrock geology is based on the geologic maps of the Hamilton, Pullman and Elk City quadrangles at a scale of 1:250,000 (Rember and Bennett, 1979). The South Fork of the Clearwater River is approximately ½ of a mile west of the spring. An intermittent stream flows along the valley near the spring.

The ground elevation is about 1,880 feet above mean sea level (amsl) at the spring. Maximum discharge from the spring and its recession characteristics are unknown; however, the usage is approximately one gallon per minute (gpm) according to the operator. Little information is known about the hydrogeology of the area.

There are several methods of mapping protection zone delineations for springs as discussed in the EPA report written by Jensen et al., 1997. These include surface mapping of hydrogeologic features, which is based upon geologic mapping, fracture-trace analysis, and topographic and geographic analyses, catchment area estimation, tracer studies, geochemical characterization, isotope studies, potentiometric surface mapping, geophysical techniques, and methods used to support hydrogeologic mapping. Due to limited available data, the Harpster spring delineations are determined by examining:

FIGURE 1. Geographic Location of Harpster Community System



1. Drainage basin boundaries from topographic maps
2. Lithologic units from which the spring derives water
3. Identification of low permeability lithologic units (as possible hydrologic boundaries)
4. Identification of faults or other structural features (also as possible hydrologic boundaries)
5. Identification of potential recharge areas
6. Catchment area (Todd, 1980)

Based on the geologic and topographic maps, there are several ground water boundaries surrounding the spring but none appear to be within its drainage basin. Granite from the Idaho Batholith crops out in the vicinity of the spring. In addition, there is a normal fault to the south that provides a boundary for the watershed.

No aquifer recharge data are available for the Harpster area. In a study by Wyatt-Jaykim (1994) recharge to the central basin (Lewiston basin) was modeled as one inch per year (in/yr); two in/yr was selected in the higher areas. Because the Harpster spring area lies at a higher elevation than most of the basin, precipitation rates are higher. Recharge is therefore expected to be greater.

The amount of a real recharge used in the model for the Harpster spring source is two in/yr. This is a low value for higher elevations and is conservative. Greater recharge causes a smaller delineation when using the catchment area estimation. Estimated recharge areas have elevations up to 2,600 feet (ft) amsl compared to Lewiston at approximately 700 ft amsl.

As the location of the spring was determined to be incorrect, the method used by the University of Idaho was applied by DEQ to the new location. The capture zone delineated herein is based on limited data and must be taken as a best estimate. If more data become available in the future this delineation should be adjusted based on additional modeling incorporating the new data.

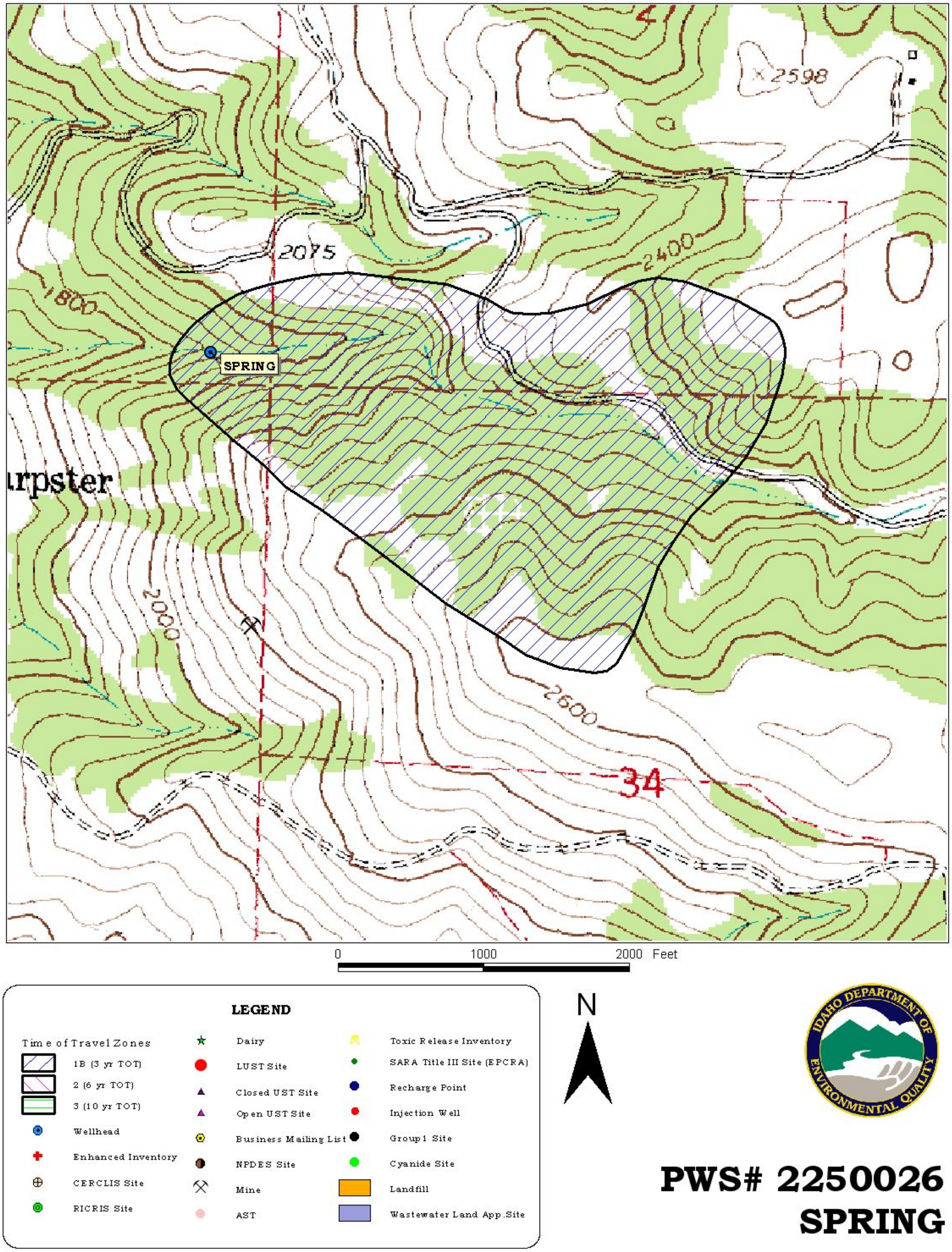
The delineated source water assessment area for the spring of the Harpster Community System can best be described as a somewhat elliptical area extending eastward from the spring for approximately ½ mile and encompassing an area of 165 acres (Figure 2). The actual data used by the University of Idaho and DEQ in determining the source water assessment delineation area is available from DEQ upon request.

Identifying Potential Sources of Contamination

A potential source of contamination is defined as any facility or activity that stores, uses, or produces, as a product or by-product, the contaminants regulated under the Safe Drinking Water Act and has a sufficient likelihood of releasing such contaminants at levels that could pose a concern relative to drinking water sources. The goal of the inventory process is to locate and describe those facilities, land uses, and environmental conditions that are potential sources of ground water contamination. The locations of potential sources of contamination within the delineation areas were obtained by field surveys conducted by DEQ and from available databases.

Land use within the immediate area and the surrounding area of the Harpster Community System spring is predominantly woodland.

FIGURE 2. Harpster Community System Delineation Map and Potential Contaminant Source Locations



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It is important to understand that a release may never occur from a potential source of contamination provided they are using best management practices. Many potential sources of contamination are regulated at the federal level, state level, or both to reduce the risk of release. Therefore, when a business, facility, or property is identified as a potential contaminant source, this should not be interpreted to mean that this business, facility, or property is in violation of any local, state, or federal environmental law or regulation. What it does mean is that the potential for contamination exists due to the nature of the business, industry, or operation. There are a number of methods that water systems can use to work cooperatively with potential sources of contamination, including educational visits and inspections of stored materials. Many owners of such facilities may not even be aware that they are located near a public water supply spring.

Contaminant Source Inventory Process

A two-phased contaminant inventory of the study area was conducted from October 2002 through March 2003. The first phase involved identifying and documenting potential contaminant sources within the Harpster Community System source water assessment area (Figure 2) through the use of computer databases and Geographic Information System (GIS) maps developed by DEQ. The second, or enhanced, phase of the contaminant inventory involved contacting the operator to identify and add any additional potential sources in the area.

The delineated source water assessment area of the spring of the Harpster Community System does not contain any potential contaminant sources (Figure 2). However, a field survey completed in July 1997 indicates that the nearby creek flows within 30 feet of the spring area. The creek is included in the delineation and is used as a potential source, given that it can potentially contaminate the spring water with IOCs, VOCs, SOCs, or microbial contaminants through surface flooding or leaching.

Section 3. Susceptibility Analysis

A spring's susceptibility to contamination was ranked as high, moderate, or low risk according to the following considerations: construction, land use characteristics, and potentially significant contaminant sources. The higher the ranking the system receives in any of the considerations or in the total susceptibility of the system, the more vulnerable the system is to contamination. The susceptibility rankings are specific to a particular potential contaminant or category of contaminants. Therefore, a high susceptibility rating relative to one potential contaminant does not mean that the water system is at the same risk for all other potential contaminants. The relative ranking that is derived for the spring is a qualitative, screening-level step that, in many cases, uses generalized assumptions and best professional judgement. Attachment A contains the susceptibility analysis worksheet. The following summaries describe the rationale for the susceptibility ranking.

Spring Construction

Spring construction scores are determined by evaluating whether the spring has been constructed according to Idaho Code (IDAPA 58.01.08.04) and if the spring's water is exposed to any potential contaminants from the time it exits the bedrock to when it enters the distribution system. If the spring's intake structure, infiltration gallery, and housing are located and constructed in such a manner as to be permanent and protect it from all potential contaminants, is contained within a fenced area of at least 100 feet in radius, and is protected from all surface water by diversions, berms, etc., then Idaho Code is being met and the score will be lower. If the spring's water comes in contact with the open atmosphere before it enters the distribution system, it receives a higher score. Likewise, if the spring's water is piped directly from the bedrock to the distribution system or is collected in a protected spring box without any contact to potential surface-related contaminants, the score is lower.

The Harpster Community Spring has a highly susceptible system construction. Very little information concerning the construction of the spring is available. According to the field inspection conducted in 1997, the collection pipes are shallowly buried on the side of a north-facing hillside at almost the same elevation as the nearby creek. A fence creating a 100-ft barrier protects the spring. The intake is a steel pipe going directly from the underground source to the enclosed spring box. The spring collection area parallels the creek 30 feet away, indicating that the spring is not located to minimize contamination. However a natural berm is present reducing the cross connection. When information is not available, a higher, more conservative, score is given.

Potential Contaminant Source and Land Use

The potential contaminant source and land use of the Harpster Community System rated low for IOCs (e.g. nitrates, arsenic), VOCs (e.g. petroleum products, chlorinated solvents), SOCs (e.g. pesticides), and microbial contaminants (e.g. bacteria). The only potential contaminant source within the delineation was the nearby stream. In addition, the area is dominated by low impact woodland land uses. These factors reduce the susceptibility to contamination at the spring.

Final Susceptibility Ranking

An IOC detection above a drinking water standard MCL, any detection of a VOC or SOC, or a detection of total coliform bacteria or fecal coliform bacteria at the spring will automatically give a high susceptibility rating to a spring despite the land use of the area because a pathway for contamination already exists. Additionally, if there are contaminant sources located within 100 feet of the source then the spring will automatically get a high susceptibility rating. In this case, a nearby creek flows within 30 feet of the spring collection area, resulting in automatic high susceptibility scores for the system. Hydrologic sensitivity and system construction scores are heavily weighted in the final scores. Having multiple potential contaminant sources in the 0 to 3-year time of travel zone (Zone 1B) and agricultural land contribute greatly to the overall ranking. The Harpster Community System Spring has high susceptibility to all potential contaminant categories.

Table 1. Summary of Harpster Community Water System Spring Susceptibility Evaluation

Susceptibility Scores[1]									
Source	Potential Contaminant Inventory				System Construction	**Final Susceptibility Ranking**			
	IOC	VOC	SOC	Microbial		IOC	VOC	SOC	Microbial
Spring	L	L	L	L	H	H*	H*	H*	H*

[1]H = High Susceptibility, M = Moderate Susceptibility, L = Low Susceptibility,
IOC = inorganic chemical, VOC = volatile organic chemical, SOC = synthetic organic chemical
H* = Automatic high susceptibility due to creek that flows within 30 feet of the spring collection area

Susceptibility Summary

In terms of total susceptibility, the Harpster Community spring rated automatically high for all potential contaminant categories: IOCs, VOCs, SOCs, and microbial contaminants. A field inspection completed in July 1997 indicates that a creek flows within the 100-foot sanitary setback of the spring, resulting in automatic high susceptibility ratings. If this creek were diverted to a location greater than 100 feet from the spring collection area, the overall susceptibility of the system would be reduced.

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Section 4. Options for Drinking Water Protection

The susceptibility assessment should be used as a basis for determining appropriate new protection measures or re-evaluating existing protection efforts. No matter what the susceptibility ranking a source receives, protection is always important. Whether the source is currently located in a “pristine” area or an area with numerous industrial and/or agricultural land uses that require surveillance, the way to ensure good water quality in the future is to act now to protect valuable water supply resources.

For the Harpster Community System, drinking water protection activities should first focus on correcting any deficiencies outlined in the sanitary survey. Actions should be taken to keep a 100-foot radius perimeter clear of all potential contaminants from around the spring. Any contaminant spills within the delineation should be carefully monitored and dealt with. The Harpster Community System may want to consider reconstructing the infiltration gallery and the spring box to further protect their drinking water source. As much of the designated protection areas are outside the direct jurisdiction of the Harpster Community drinking water system, collaboration and partnerships with state and local agencies, and industry groups should be established and are critical to the success of drinking water protection.

Due to the time involved with the movement of ground water, drinking water protection activities should be aimed at long-term management strategies even though these strategies may not yield results in the near term. As there are some urban and residential land uses within the delineation, a strong public education program should be a primary focus of any drinking water protection plan. Public education topics could include proper lawn and garden care practices, hazardous waste disposal methods, proper care and maintenance of septic systems, and the importance of water conservation to name but a few. There are multiple resources available to help communities implement protection programs, including the Drinking Water Academy of the EPA.

A system must incorporate a variety of strategies in order to develop a comprehensive drinking water protection plan, be they regulatory in nature (e.g. zoning, permitting) or non-regulatory in nature (e.g. good housekeeping, public education, specific best management practices). For assistance in developing protection strategies please contact the Lewiston Regional Office of the DEQ or the Idaho Rural Water Association.

Assistance

Public water supplies and others may call the following DEQ offices with questions about this assessment and to request assistance with developing and implementing a local protection plan. In addition, draft protection plans may be submitted to the DEQ office for preliminary review and comments.

Lewiston Regional DEQ Office (208) 799-4370

State DEQ Office (208) 373-0502

Website: http://www.deq.state.id.us

POTENTIAL CONTAMINANT INVENTORY
LIST OF ACRONYMS AND DEFINITIONS

AST (Aboveground Storage Tanks) – Sites with aboveground storage tanks.

Business Mailing List – This list contains potential contaminant sites identified through a yellow pages database search of standard industry codes (SIC).

CERCLIS – This includes sites considered for listing under the **Comprehensive Environmental Response Compensation and Liability Act (CERCLA)**. CERCLA, more commonly known as Superfund is designed to clean up hazardous waste sites that are on the national priority list (NPL).

Cyanide Site – DEQ permitted and known historical sites/facilities using cyanide.

Dairy – Sites included in the primary contaminant source inventory represent those facilities regulated by Idaho State Department of Agriculture (ISDA) and may range from a few head to several thousand head of milking cows.

Deep Injection Well – Injection wells regulated under the Idaho Department of Water Resources generally for the disposal of stormwater runoff or agricultural field drainage.

Enhanced Inventory – Enhanced inventory locations are potential contaminant source sites added by the water system. These can include new sites not captured during the primary contaminant inventory, or corrected locations for sites not properly located during the primary contaminant inventory. Enhanced inventory sites can also include miscellaneous sites added by the Idaho Department of Environmental Quality (DEQ) during the primary contaminant inventory.

Floodplain – This is a coverage of the 100year floodplains.

Group 1 Sites – These are sites that show elevated levels of contaminants and are not within the priority one areas.

Inorganic Priority Area – Priority one areas where greater than 25% of the wells/springs show constituents higher than primary standards or other health standards.

Landfill – Areas of open and closed municipal and non-municipal landfills.

LUST (Leaking Underground Storage Tank) – Potential contaminant source sites associated with leaking underground storage tanks as regulated under RCRA.

Mines and Quarries – Mines and quarries permitted through the Idaho Department of Lands.)

Nitrate Priority Area – Area where greater than 25% of wells/springs show nitrate values above 5 mg/L.

NPDES (National Pollutant Discharge Elimination System) – Sites with NPDES permits. The Clean Water Act requires that any discharge of a pollutant to waters of the United States from a point source must be authorized by an NPDES permit.

Organic Priority Areas – These are any areas where greater than 25% of wells/springs show levels greater than 1% of the primary standard or other health standards.

Recharge Point – This includes active, proposed, and possible recharge sites on the Snake River Plain.

RICRIS – Site regulated under **Resource Conservation Recovery Act (RCRA)**. RCRA is commonly associated with the cradle to grave management approach for generation, storage, and disposal of hazardous wastes.

SARA Tier II (Superfund Amendments and Reauthorization Act Tier II Facilities) – These sites store certain types and amounts of hazardous materials and must be identified under the Community Right to Know Act.

Toxic Release Inventory (TRI) – The toxic release inventory list was developed as part of the Emergency Planning and Community Right to Know (Community Right to Know) Act passed in 1986. The Community Right to Know Act requires the reporting of any release of a chemical found on the TRI list.

UST (Underground Storage Tank) – Potential contaminant source sites associated with underground storage tanks regulated as regulated under RCRA.

Wastewater Land Applications Sites – These are areas where the land application of municipal or industrial wastewater is permitted by DEQ.

Wellheads – These are drinking water well locations regulated under the Safe Drinking Water Act. They are not treated as potential contaminant sources.

NOTE: Many of the potential contaminant sources were located using a geocoding program where mailing addresses are used to locate a facility. Field verification of potential contaminant sources is an important element of an enhanced inventory.

Where possible, a list of potential contaminant sites unable to be located with geocoding will be provided to water systems to determine if the potential contaminant sources are located within the source water assessment area.

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Appendix A

Harpster Community System Susceptibility Analysis Worksheet

Susceptibility Analysis Formulas

Formula for Spring Sources
The final spring scores for the susceptibility analysis were determined using the following formulas:

1. VOC/SOC/IOC/ Final Score = (Potential Contaminant/Land Use X 0.818) + System Construction

2. Microbial Final Score = (Potential Contaminant/Land Use X 1.125) + System Construction

Final Susceptibility Scoring:
0 - 7 Low Susceptibility
8 - 15 Moderate Susceptibility
≥ 16 High Susceptibility

Spring Water Susceptibility Report   Public Water System Name :
HARPSTER COMMUNITY SYSTEM   : SPRING
Public Water System Number   2250026   1/27/03 11:58:16 AM

1. System Construction

		SCORE
Intake structure properly constructed	NO	1
Is the water first collected from an underground source Yes = spring developed to collect water from beneath the ground; lower score No = water collected after it contacts the atmosphere; or unknown; higher score	NO	2
Total System Construction Score		3

2. Potential Contaminant / Land Use - ZONE 1A

		IOC Score	VOC Score	SOC Score	Microbial Score
Land Use Zone 1A	RANGELAND, WOODLAND, BASALT	0	0	0	0
Farm chemical use high	NO	0	0	0	
IOC, VOC, SOC, or Microbial sources in Zone 1A	YES	YES	YES	YES	YES
Total Potential Contaminant Source/Land Use Score - Zone 1A		0	0	0	0

Potential Contaminant / Land Use - ZONE 1B

		IOC Score	VOC Score	SOC Score	Microbial Score
Contaminant sources present (Number of Sources)	YES	1	1	1	1
(Score = # Sources X 2) 8 Points Maximum		2	2	2	2
Sources of Class II or III leacheable contaminants or	YES	1	1	1	
4 Points Maximum		1	1	1	
Zone 1B contains or intercepts a Group 1 Area	NO	0	0	0	0
Land use Zone 1B	Less Than 25% Agricultural Land	0	0	0	0
Total Potential Contaminant Source / Land Use Score - Zone 1B		3	3	3	2
Cumulative Potential Contaminant / Land Use Score		3	3	3	2

	IOC	VOC	SOC	Microbial
3. Final Susceptibility Source Score	5	5	5	5
4. Final Well Ranking	High	High	High	High